September 17, 2014

Ms. Kimberly Tisa
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: OSRR07-2
Boston, MA 02109-3912

RE:

Modification to a Risk-Based Soil Cleanup Plan

Maine Energy, Biddeford, Maine

Dear Ms. Tisa:

Maine Energy and the City of Biddeford are requesting approval of a modification to the June 2, 2014 approved risk-based Polychlorinated Biphenyl (PCB) Cleanup Plan from U.S. EPA Region 1 (EPA) in accordance with 40 CFR 761.61(c). As we have discussed in several telephone conversations, elevated PCB concentrations near the Pan Am railroad track concrete retaining wall and a river retaining wall have been identified during post-excavation sampling. Although PCB concentrations are above the original cleanup goal in this area, structural stability of the retaining walls precludes further excavation in this area.

Because of these structural stability concerns, the attached Work Plan Modification requests that the soil with elevated levels of PCBs in the structurally constrained areas remain in place. The balance of the site will be remediated according to the previously approved risk-based Polychlorinated Biphenyl (PCB) Cleanup Plan. Though some soils with PCB concentrations will remain in place above the original plan, the installation of the multi-component cap and barrier system and deed restrictions against excavation will result in a remedy that is protective of human health and the environment.

We have discussed the proposed Work Plan modification with the Maine Department of Environmental Protection (MEDEP) Voluntary Response Action Program (VRAP) Coordinator; Nick Hodgkins who concurs with the proposed modification (see the attached e-mail).

Due to the limited remaining construction season and potential for fall storms, we feel there is considerable risk of compromising the integrity of the retaining walls by leaving the excavation open. We request immediate limited approval to backfill portions of the site with the express purpose of stabilizing the excavation in areas where PCB concentrations are >25 ppm, where further excavation is limited due to structural concerns, or the excavation depth is just above groundwater. Backfill in this context is limited to installing the requested polyethylene barrier and securing the barrier with common borrow to a uniform depth of approximately 4 ft BGS. The attached drawings depict the backfill area which is generally comprised of the area adjacent to the railroad retaining wall, the eastern portion of the site, and the eastern portion of the river retaining wall. We also request a review of this modification in a timely manner so site stabilization may proceed as soon as possible.

We still have your question about groundwater monitoring to resolve in order to complete the site remediation work, but are now only requesting the approval to backfill the excavation up to the base of the cap elevation. Once the groundwater monitoring issue is resolved and the remaining sampling results confirm that the western (unconstrained) portion of the site has met the agreed upon clean-up standards, Casella will proceed with installation of the multi-component cap and barrier system.

Please contact either of us if you have any questions. We look forward to your response.

Sincerely,

Brian Oliver

Maine Energy Recovery Company, LP

CC:

John K. Cressey, Summit

Brian Phinney, City of Biddeford

Ken Robbins, Maine Energy Recovery Company, LP

Nicholas Hodgkins, Maine DEP

John Bubier City of Biddeford

MODIFICATION TO A RISK-BASED CLEANUP PLAN

Based upon the structural concerns surrounding a concrete retaining wall owned by Pan Am railroad to the north (an active Amtrak route), the potential for groundwater to enter the excavation, and the stability of an existing granite block retaining wall to the east and south along the Saco River, and a small area around active Power transmission line poles, we are requesting a modification to the currently approved Risk-Based PCB Cleanup Plan.

EXCAVATION ACTIVITIES

Excavation activities extend from the railroad concrete retaining wall (north) to the Saco River retaining wall (east and south) to the paved parking area for the former Maine Energy facility (west). The excavation at the toe of the railroad retaining wall extends approximately 18" below grade to the top of the retaining wall footer and then slopes at a 1.5 to 1 slope to a total depth of 10' below ground surface in the center of the excavation area. Excavation depth remains at approximately 10 feet below grade until the eastern granite retaining wall at the Saco River. At the northeastern edge of the property, the excavation extends to two feet below ground surface on the railroad property down to a total depth of 10' in the center of the excavation. Groundwater was determined to be at a depth of approximately 10.5' below ground surface. A Site Plan and a photographic log is attached for reference.

PCB impacts may not be solely associated with the former Boiler House building foundation materials as originally interpreted. A conversation with PanAm Railroad engineering division has been held regarding the potential for some of the observed impacts to be associated with past activities above the retaining wall or PanAm property to the north of the Site. At this time no further information is available regarding a connection beyond the fact that the highest PCB concentrations appear to be associated with the material directly adjacent to the concrete retaining wall separating the Pan Am property and the Maine Energy property. Discharge pipes associated with the bottom of this retaining wall have been plugged to prevent future discharge onto the Site.

As discussed between you and John Cressey, as supported by the attached Geotechnical Engineer's letters, the excavations should be backfilled as soon as possible to prevent long term stability concerns related to the retaining walls. In addition, soil removal around two electrical transmission line poles, northwest of the original excavation area, was limited to maintain the integrity of the poles. The transmission lines are active and serve cellular tower equipment affixed to the former Maine Energy stack. Soils surrounding these poles and underground utilities have been remediated to less than 1 ppm.

VERIFICATION SAMPLING

Verification soil sampling is being completed consistent with the original plan. Samples of the excavation floor are collected following the approved sampling plan and consist of collecting three individual samples with a core sampler to a maximum depth of 7.5 cm for each grid as designated in the Work Plan. The three samples are consolidated to create a single sample for the sub-area of the floor sampling grid. Excavation sidewall samples are collected in the same manner, but at a frequency of one sample every 25 ft². In areas where verification sampling results are above the cleanup goal of 25 ppm, additional excavation occurs until verification sample results are below 25 ppm or a depth of 10 feet below grade is reached (approximate depth of groundwater table), or structural stability concerns with the retaining walls preclude further excavation.

VERIFICATION SAMPLING RESULTS

To date, over 350 soil samples have been collected and verification analytical results from the final floor of the excavation range from non-detect to 15,900 ppm (located at 4' below ground surface near the railroad retaining wall). The western portion of the site will be remediated to less than 25 ppm on the floor of the excavation and less than 1 ppm along the sidewall. In some areas, groundwater or the retaining walls (either the river or the railroad) have precluded excavation of materials exhibiting concentrations greater than 25 ppm. In areas where additional soil can be removed safely (mainly the western portion of the Site)additional soil analytical results will be obtained until the cleanup goal of 25 ppm has been met.

As can be seen on the attached plans, soil verification sampling completed to date indicates areas that have met the original cleanup goal, areas where excavation activities are still ongoing to meet the cleanup goal of 25 ppm, and those areas with structural considerations which have limited our ability to get to the cleanup goal.

BACKFILL AND CAP

This Plan modification requests approval to backfill the excavation to stabilize the site in areas where PCB concentrations are <25 ppm, further excavation is limited due to structural concerns, or the excavation depth is just above groundwater. Backfill in this context is limited to installing the requested overlapping polyethylene sheeting and then backfilled per our original specification with common borrow extending from the polyethylene to four feet below grade.

Once the remainder of the soil in the western portion of the site has been excavated (see site plan 1) leaving PCB concentrations <25 pm as demonstrated by verification analysis or the depth of the excavation is limited by proximity to groundwater, this area will be covered with overlapping polyethylene sheeting and covered with common borrow to match the backfill layer on the eastern side of the excavation. Twelve inches of barrier soil will be placed from 3 to 4 feet over remaining impacted soil and/or backfill. A 40-mil textured high density polyethylene (HDPE) geomembrane liner will overly the barrier soil layer and be installed in accordance with manufacturers recommendations by an experienced installer. A drainage geocomposite layer comprised of bi-planar HDPE netting sandwiched between non-woven geotextile filter fabric will overlay the geomembrane. Geocomposite will extend over the limit of the cap and be installed according to manufacturer's recommendations by an experienced installer. In addition to conveying surface water away from the excavation area, the HDPE netting and geotextile fabric provides a physical protective layer over the geomembrane.

A 12 inch thick compacted sand drainage layer shall be placed over the installed geocomposite. A crushed stone underdrain will be installed at the eastern limit of the cap system and extend along the existing granite retaining wall adjacent to the Saco River to allow surface water to drain away from the cap system.

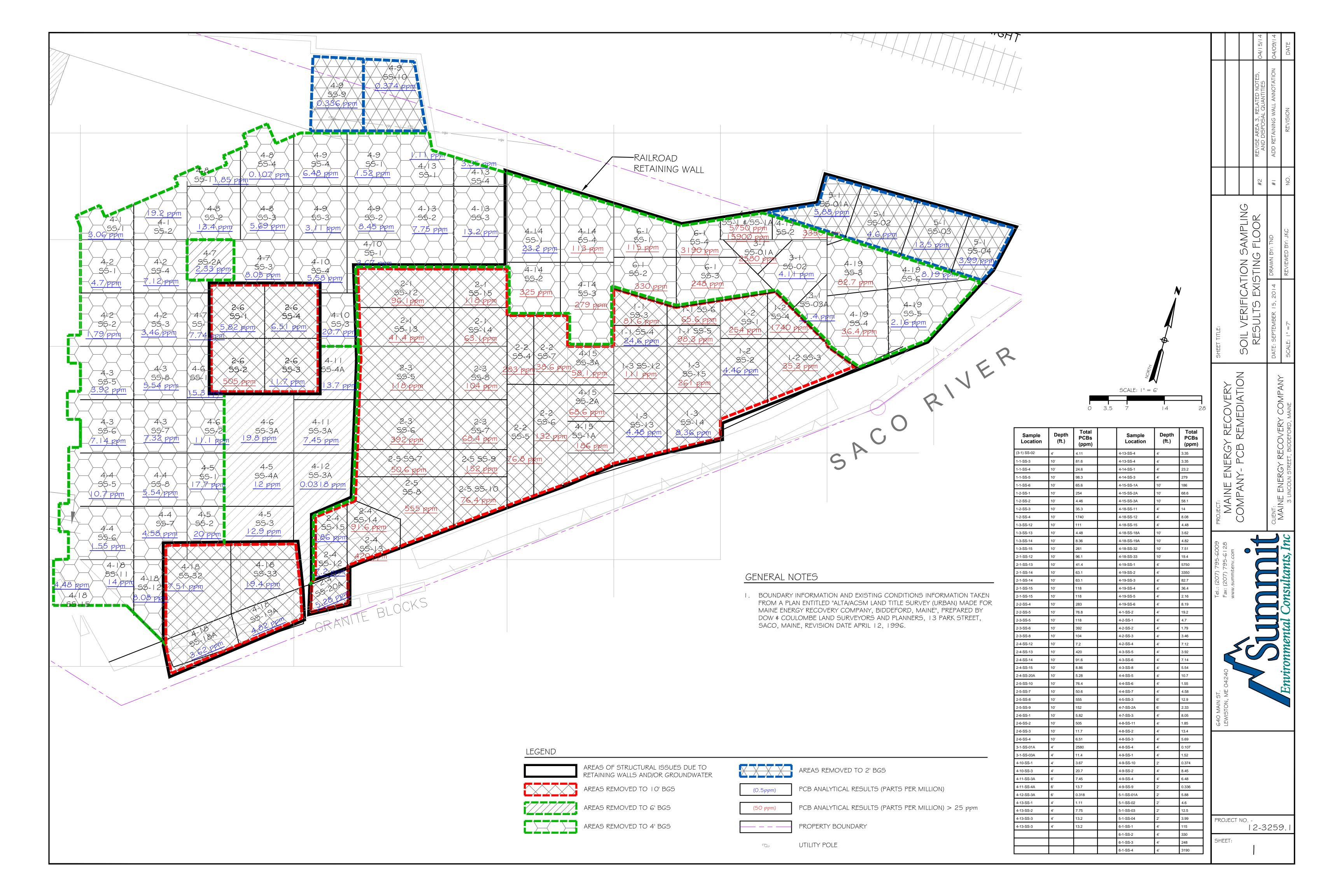
After the installation of drainage sand layer and stone underdrain, a marker layer (orange site safety fence) is to be installed at a depth of 2 feet below finished grade to alert persons of the presence of underlying materials that should not be disturbed. An 18 inch thick layer of granular borrow is to be placed and compacted over the marker layer.

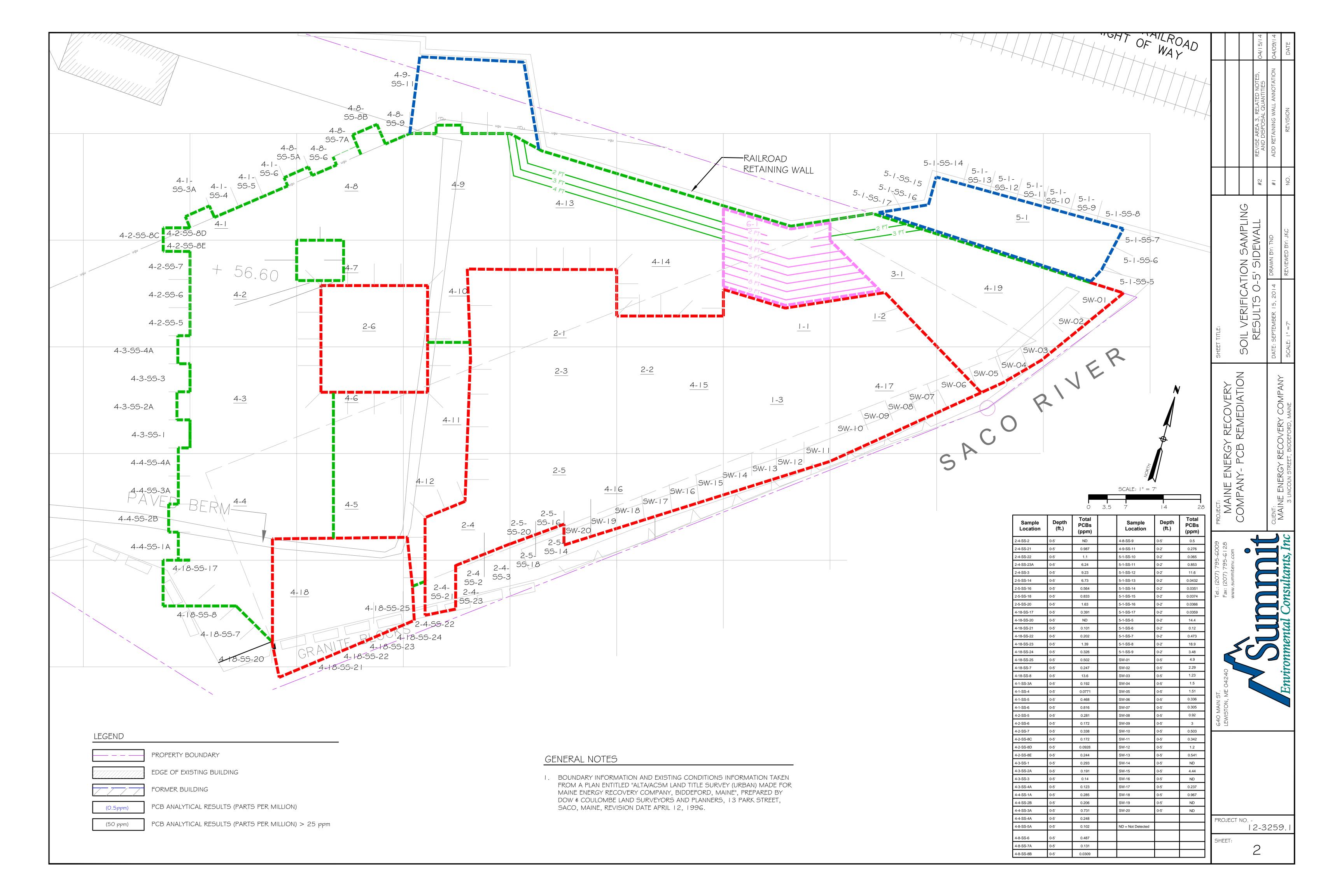
The surface of compacted granular borrow is to be scarified to a depth of 2 inches prior to placement of 6 inches of loam then seeded and mulched.

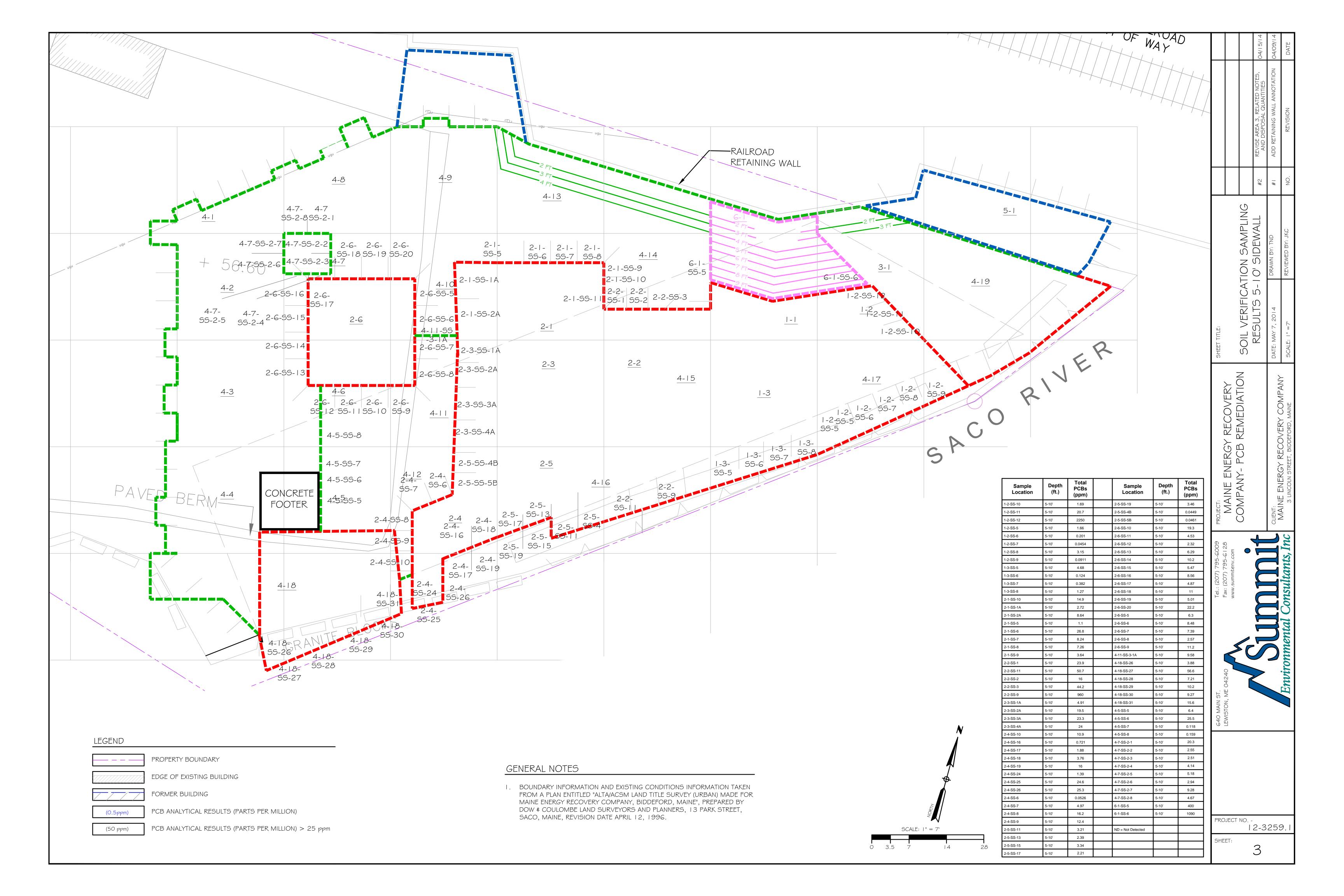
POST CONSTRUCTION ACTIVITIES

A post-construction report will be prepared following remediation to document the completed field activities, present the verification sampling data, and provide copies of the waste manifests executed for the transportation and disposal of the waste. All reports will be maintained on file at City Hall (property owner), in accordance with the record-keeping requirements of Subpart J of 40 CFR 761. Copies of records will be made available to the EPA, upon request.

Land use in the cleanup area and an abutting 25 feet buffer will be subject to restrictions contained in a deed notice and environmental covenant. Execution of the environmental covenant will be completed within 60-days of the agencies' "certificate of completion" or equivalent. Recordation of the Deed Covenant as well as other Institutional controls (non-PCB related) will be documented in the MEDEP VRAP.









PHOTOGRAPHIC LOG

Client Name: Casella Project No. 12-3259.1

Photo No. 1

Date: 8/1/14

Site Location: Lincoln Street Biddeford, Maine

Description:

View of the retaining wall and the potential transformer above.



Photo No. 2

Date: 8/20/14

Site Location: Lincoln Street, Biddeford, ME Description:

View of the excavation from the west.





PHOTOGRAPHIC LOG

Client Name: Casella Project No. 12-3259.1

Photo No. 3

Date: 8/11/13

Site Location: Lincoln Street, Biddeford, ME

Description:

View of the Saco River retaining wall from the east.

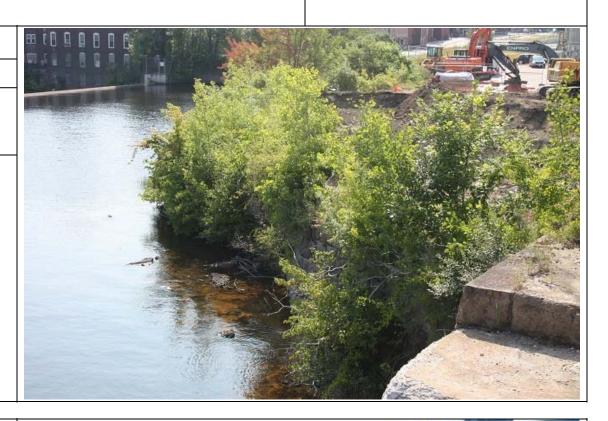


Photo No. 4

Date: 9/5/14

Site Location: Lincoln Street, Biddeford, ME

Description:

View of the river retaining wall within the excavation.





PHOTOGRAPHIC LOG

Client Name: Casella Project No. 12-3259.1

Photo No. 5

Date: 9/5/14

Site Location: Lincoln Street, Biddeford, ME

Description:

View of the river's edge to the west of the retaining wall.





August 29, 2014 Summit #13051

CES Inc.

Attn: John Cressey, C.G. 640 Main Street Lewiston, ME 04240

Reference:

Utility Pole Excavation Recommendations - PCB Remediation

Maine Energy Recovery Company - 3 Lincoln Street Biddeford, Maine

Dear Mr. Cressey:

This letter is in response to your question regarding stability of excavations adjacent to existing utility poles for the PCB remediation at Maine Energy Recovery in Biddeford, Maine. This is in reference to our geotechnical excavation recommendations provided in our Report #13051 dated March 29, 2013.

We understand excavation adjacent to existing utility poles may be required as part of remediation. The utility poles are estimated as having an embedment depth of approximately 6 feet with an above grade height of approximately 25 feet. Currently the utility poles are connected to overhead power transmission which is active. Embedment soils are anticipated as granular fill based on the soil conditions encountered during the soil investigation (borings) and observed excavations during our site visits.

Based on this we recommend excavations be limited to a temporary depth of 2 feet, to maintain a minimum pole embedment depth of 4 feet, within a 6 foot radius adjacent to the existing utility poles. Duration of the excavation adjacent to the utility poles should be limited to 24 to 48 hours during fair weather conditions. Excavation should not be performed during high wind or stormy conditions. Where longer duration of excavation is required, utility poles should be temporarily backfilled or braced with reinforcement to provide foundation stability during potential high wind or stormy weather. Construction during the fall will be within hurricane season. Excavations onsite should be backfilled and/or braced where possible during extended periods.

We appreciate the opportunity to provide geotechnical support, please call with any questions.

Sincerely yours,

Summit Geoengineering Services,

Craig W. Coolidge, P.E.

Vice President & Principal Engineer



September 5, 2014 Summit #13051

CES Inc. Attn: John Cressey, C.G. 640 Main Street Lewiston, ME 04240

Reference:

Geotechnical Excavation Recommendations - PCB Remediation

Maine Energy Recovery Company - 3 Lincoln Street Biddeford, Maine

Dear Mr. Cressey:

This letter is in response to the excavation activities for the PCB remediation at Maine Energy Recovery in Biddeford, Maine. This is in reference to our geotechnical excavation recommendations provided in our Report #13051 dated March 29, 2013.

This response is in regards the long-term stability for the excavations being performed. From our site visit performed on July 31, 2014 significant portions of the site have been excavated to their maximum depths and slope permitted per our excavation recommendations in Report #13051. Due to the time of construction entering into the fall and possibly the winter we recommend larger excavations are backfilled adjacent to structures such as retaining walls and utility poles in as timely manner as possibly as excavation slope limits provided are based on temporary construction activities.

Backfilling upon completion of excavation will prevent slope sloughing by freeze-thaw for exposed soil cuts. Backfilling will also provide additional stability during potential stormy conditions typical to the fall and winter periods.

Where excavations are not backfilled within a timely manner exposed structures such as retaining walls and utility poles should be braced where possible during extended periods.

We appreciate the opportunity to provide geotechnical support, please call with any questions.

Sincerely yours,

Summit Geoengineering Services,

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Craig W. Coolidge, P.E.

Vice President & Principal Engineer

From: Hodgkins, Nick [mailto:Nick.Hodgkins@maine.gov]

Sent: Monday, September 15, 2014 9:15 AM

To: John Cressey

Subject: Maine Energy, Biddeford

John,

Based on the information you have provided and my observations while at the site, it is my opinion that the PCB cleanup at the former Maine Energy site in Biddeford has been completed in the area between the railroad retaining wall and the seawall as much as it can be completed, considering the difficult structural limitations of the active passenger railroad line (and underlying support system) on one side of the excavation and the stone retaining wall on the river side of the excavation. Further excavation in that area would risk structural failure of one (or both), which could cause substantial damage that would be a major undertaking to fix.

Given that the removal actions completed to date have removed the bulk of contaminated soils, that the remaining soils are at a significant depth below the ground surface, and that further actions are likely to create unsafe/unstable conditions, I would support the cessation of all excavation activities in the area between the railroad retaining wall and the seawall and the backfilling of the removal area with clean soils.

Please let me know if you have any questions.

Nick

Nicholas J. Hodgkins
Oil & Hazardous Materials Specialist in the Bureau of Remediation & Waste Management
Maine Department of Environmental Protection
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